

First Year Seminar – Spring 2009
FRPG 188U

Natural Environmental Hazards: Causes, Effects and Risk Assessment

Class Meets: TTh 10:10-11:40 a.m. and Th 12:40-2:10 p.m. in Brown 142

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Course Description

In this FYS we will develop an understanding of the causes of catastrophic natural events (typically referred to as ‘natural environmental hazards’). These clearly have had, and will continue to have, a profound effect on human existence in the form of destruction of buildings, communication systems and loss of life. The causes and sometimes devastating effects of volcanic eruption, earthquakes, landslides, flooding, tsunamis, tornadoes and hurricanes, and changes in climate will all be discussed in some detail. Successful attempts at protection are rare and, at best, short lived (and, in the majority of cases, impossible), so we are left with producing sufficiently accurate prediction techniques and to making an assessment of the risk level. However, the same risk factor may be viewed quite differently by different groups - according to their needs, income, preference, expertise or ignorance. Some of the questions we will attempt to answer are: How do we perceive risk, and why do we continue to live in locations that are known to be prone to these risks? Remediation is generally very costly, who should pay?; Should governments have the right to restrict living and building in areas known to be at risk?

In addition to discovering factual data as to the causes and nature of these catastrophes you will be carrying out significant independent research on a topic that interests you within this field. Your research will address the way that these natural events can impact human societies and cultures – and, in some instances, how human activity can initiate such events – as well as the detailed mechanism for the origin of the natural catastrophe that you select. Research topics are due early in the semester (please see syllabus below).

Attendance Policy: You must attend and participate in all meetings; however, some absences are likely unavoidable; I will allow up to three unexcused absences without penalty. Beyond three unexplained absences I will begin to deduct from your final grade (2% per absence).

Late work: Missing the due date (and time) for graded exercises is unacceptable, unless in extreme circumstances. A penalty of 25% per day will be applied to late work.

Readings: There are two required texts for this course: one is a popular journalistic approach to three specific topics (landslides, flooding and volcanic eruption) whereas, the other, is a systematic academic coverage of environmental hazards (including human induced ones). You should note carefully the differences in style. In addition to these, you will be carrying out significant reading from a variety of sources in support of your research topic (scholarly articles, press releases, texts, and, yes, even the web). The required texts are:

John McPhee. 1989. *The Control of Nature*. Farrar, Straus, and Giroux, 272 p. You may have already read this text, but it does provide a wonderful entry to our subject. You will be using McPhee at four stages during the course.

Smith, Keith. 2007. *Environmental hazards: Assessing risk and reducing disaster*, fourth edition. New York: Routledge. ISBN: 0-415-31804-1 (pbk), 306p: as a reference and readings throughout the course.

Portfolio: You are required to present a portfolio of all the work you do in this course. This portfolio will be graded in terms of completeness and layout. You should include not only include your graded work but also drafts, course notes, and notes on your literature research.

Tests: There will be two one-hour tests. Although there will not be a final exam, you should note that the final (third) draft of your research paper and your complete portfolio will be due on the first day of exam week.

Research: Research on a topic that is agreeable to both of us will be carried out during the middle part of the semester. Your research will be presented in two formats: a formal paper of between 12 - 20 pages in length (incl. 'references cited' and an abstract); and a PowerPoint presentation followed by discussion and questions from your audience (other members of the class, plus guests). More details will be given later in the course.

Grades: The final grade distribution is as follows:

Ex. I	In-class experience essay (1p.)	4%	
Ex. II	<u>Cooling the lava</u> précis (3p.)	6%	
Ex. III	Eruption contrast essay (2-3p.)	6%	
Ex. IV	Research topic proposal (0.5-1p)	4%	
Test I		10%	
Ex.V	Refined research proposal	5%	
Ex.VI	Draft opening paragraph (0.5-1p.) and a list of topics to be covered in your article (possible subheadings)	10%	
Test II		10%	
First draft of research paper	(12-20p.)	10%	
PowerPoint presentation		10%	
Final draft of research paper		15%	
Portfolio and participation		10%	<u>100%</u>

Syllabus:

Within the following syllabus you will see due dates for various written exercises and readings. It is important that you look ahead to at least the following week so that you can start your reading with plenty of time to spare, and to work towards the given due dates (note that we will be having discussion sessions on *The Control of Nature* readings: take notes as you read!). The written exercises are identified Ex.I, Ex.II, etc.

Week 1: Jan 19-23 : Introduction

T. (Meeting 1): Introduction to the course; syllabus review; personal experience piece (Ex.I)
Th. (Meeting 2): What do we mean by 'catastrophe', 'disaster', 'hazard', etc.
Th. (Meeting 3): General review of the causes of natural hazards – both geological and atmospheric

Reading: McPhee, *The Control of Nature*, p. 95-179 (Cooling the lava)
Smith, Ch. 1: Hazards in the environment

Written work: Ex I. In class experience short essay. Polished version **due Tuesday 27th at 5:00 pm**
Ex II. Start work on a short paraphrased summary (précis) of Cooling the lava.

Week 2: Jan 26-30:

T. (Meeting 4): General geological review, etc. (cont.)
Th. (Meetings 5): The enormity of disasters (introduction)
Th. (Meeting 6): Pinatubo 1993 video
Reading: Smith, Ch. 2: Dimension of disaster
McPhee, pp. 221-254 (for discussion sometime next week).

Written work: Ex.II: Complete and hand in short (three-page précis) of Cooling the lava.
Due 5:00 pm Friday 30th
Start Ex.III: (Compare and contrast in detail the two eruption styles seen in the Pinatubo video and Cooling the lava; 2-3 pages)

Week 3: Feb 2-6:

T. Meeting 7: The nature of scientific research; scale of disasters (cont.)
Th. Meeting 8: Video summary of volcanic hazards. Scientific method - discussion
Th. Meeting 9: Selecting a research topic; writing a thesis/creating a hypothesis;
the quality of available research sources – discussion.

Reading: Smith, Ch. 6: Tectonic hazards: volcanoes (part)

Written work: Complete Ex. III: **Due 5:00 pm Monday 9th**

Week 4: Feb 9-13:

T. Meeting 10: Earthquakes and earthquake risk (intro.) Library visit?
Th. Meeting 11: Earthquakes video
Th. Meeting 12: No meeting

Reading: Smith, Ch. 5: Tectonic hazards – earthquakes

Written work: Ex.IV: Initial research topic ideas (one page). **Due Monday 16th at 5:00 pm**

Week 5: Feb 16-20:

T. Meeting 13: Individual conferences start in my office hours (T. 1:30 to 3:30)
Th. Meeting 14: Individual conferences (continued)
Th. Meeting 15: Earthquakes (cont.)

Reading: Smith, Ch. 5: Tectonic hazards: earthquakes

Written work: Ex.V: Refined research proposal **due Thursday 26th at 5:00 pm.**

Week 6: Feb 23-27:

T. Meeting 16:	Test I: first third of the course (readings and videos). Mass movement
Th. Meeting 17:	Mass movement (cont)
Th. Meeting 18:	Work on draft first paragraph
Reading:	Smith, Ch. 7: Mass movement hazards McPhee, <i>The Control of Nature</i> , p. 183-272 (<u>Los Angeles against the mountains</u>)
Written work:	<u>Ex.VI</u> : Draft opening paragraph of research paper due Monday 2nd at 5:00 pm (together with five journal sources, one web source, and two text sources – all correctly cited under the heading ‘References Cited’).

Week 7: Mar 2-6:

T. Meeting 19:	Severe storms, including Katrina
Th. Meeting 20:	Storms (cont.)
Th. Meeting 21:	Presentations of opening paragraph
Reading:	Smith, Ch. 8: Severe storms
Written work:	Revised opening paragraph (<u>Ex.VI</u>) plus a firm list of topics to be covered in your research paper due Tuesday 10th at 5:00 pm. Continue work on your research paper.

Week 8: Mar 9-13:

T. Meeting 22:	Hydrological hazards: floods
Th. Meeting 23:	Hydrological hazards: drought
Th. Meeting 24:	Discussion
Reading:	Smith, Ch. 10 – 11: floods and droughts McPhee, <i>The Control of Nature</i> p. 3-92 (<u>Atchafalaya</u>)
Written work:	Continue working on research paper

Week 9: Mar 13-22:

Spring Recess

Week 10: Mar 23-27:

T. Meeting 25:	Biophysical hazards
Th. Meeting 26:	Biophysical hazards (cont.)
Th. Meeting 27:	Work on first draft of research paper
Written work:	First draft of research paper due on Monday 30th at 5:00 pm Start work on PowerPoint presentation
Reading:	Smith, Ch. 9: Biophysical hazards

Week 11: Mar 30-Apr 3:

T. Meeting 28: 'Context' hazards
Th. Meeting 29: Individual conferences on research paper
Th. Meeting 30: Individual conferences on research paper

Written work: Continue work on second draft of research paper

Reading: Smith, Ch. 13: Context hazards

Week 12: Apr 6-10:

T. Meeting 31: **Test II** (second third of course, readings and videos: up to and incl. week 10)
Th. Meeting 32: Some myths about global warming
Th. Meeting 33: Work on PowerPoint presentations

Reading: Smith, Ch. 13: Context hazards

Written work: Second draft of research paper **due on Friday 12th at 5:00 pm.**

Week 13: Apr 13-17:

T. Meeting 34: Risk assessment and mitigation
Th. Meeting 35: Risk assessment and mitigation
Th. Meeting 36: Technological hazards; brief review

Reading: Smith, Ch. 3: Risk assessment and management
Smith, Ch. 4: Reducing the impacts of disaster

Week 14: Apr 20-24:

T. Meeting 37: Presentations
Th. Meeting 38: Presentations
Th. Meeting 37: Presentations

Week 15: Apr 27-May 1:

T. Meeting 40: Presentations
Th. Meeting 41: Presentations
Th. Meeting 42: Presentations

Final Exam Period: May 4-9:

Portfolio, final draft of research paper, and PowerPoint presentation CD due on the **8th May.**

The WORD Studio:

In addition to the help you can receive from me and [mentor's name], the Munn Center for Rhetoric and Communication maintains The WORD Studio in ODY Library—a place to get feedback from peers on assignments in Writing, Oral communication, Research, and Design of visual projects. You can come for a consultation to plan a paper or presentation (you don't need anything but a blank piece of paper!); to find ways to improve the ideas, organization, and style of a draft; to videotape and review a presentation rehearsal; to practice a PowerPoint presentation, and more. Peer tutors are not proofreaders or editors who silently “fix” your work for you; instead, they are trained to have a conversation with you about ways you can fix problem areas yourself and become better overall communicators. You may use The WORD Studio for consultations on assignments for any of your courses, although for FYP assignments you should first seek out [mentor's name] during [his/her] office hours.

The WORD Studio is open Monday through Thursday, 8:30 a.m. to 11:00 p.m.; Friday, 8:30 a.m. to 4:00 p.m.; and Sunday, 1:00 p.m. to 11:00 p.m. You may also IM the Studio during regular hours with quick questions about grammar, citation, and style: *SLUword*.

First-Year Seminars Research Project Learning Goals 2007-08

With respect to research skills specifically, our learning goals for the spring are that students should:

- Be introduced to ways of conducting productive and imaginative inquiry and research in order to become a part of the various conversations surrounding issues.
- Learn to differentiate among the various ways that information is produced and presented, between popular and scholarly journals and books, between mainstream and alternative publications, between primary and secondary sources.
- Learn how to evaluate and synthesize information, whether gathered from traditional sources, e.g., books and journals, or from websites or electronic media.
- Begin to develop the skills of critical analysis in the interpretation and use of information gathered from any source.
- Be introduced to the ethical obligations that scholars have to both responsibly represent their sources and inform their readers of the sources of their information, as well as learning, and being held responsible for the proper use of, the conventions of scholarly citation and attribution.
- Present the results of your research in written, spoken, visual and/or other forms that demonstrate the ability to communicate effectively using the conventions of the mode of communication adopted.

The Academic Honor Code

All students at St. Lawrence University are bound by honor to maintain the highest level of academic integrity. By virtue of membership in the St. Lawrence community, every student accepts the responsibility to know the rules of academic honesty, to abide by them at all times, and to encourage all others to do the same.

Responsibility for avoiding behavior or situations from which academic dishonesty may be inferred rests entirely with the students. Students should be sure to learn from faculty what is expected as their own work and how the work of other people should be acknowledged.

Academic Dishonesty, according to the *Student Handbook*: includes any dishonest conduct in connection with any academic (including research) course, program, or work.

1. It is assumed that all work submitted for credit is done by the student unless the instructor gives specific permission for collaboration.
2. Cheating on examinations and tests consists of knowingly giving or using, or attempting to use unauthorized assistance during examinations or tests.
3. Dishonesty in work outside of examinations and tests consists of handing in for credit as original work that which is **not** original, where originality is required.
4. Falsifying research methods, data, and/or results constitutes academic dishonesty.

The following constitute examples of academic dishonesty:

- a) *Plagiarism*: Presenting as one's own work the work of another person—words, ideas, data, evidence, thoughts, information, organizing principles, or style of presentation — without proper attribution. Plagiarism includes paraphrasing or summarizing without acknowledgment by quotation marks, footnotes, endnotes, or other indices of reference (cf. Joseph F. Trimmer, *A Guide to MLA Documentation*).
- b) Handing in false data, reports or results in connection with any research project or experiment.
- c) Handing in a book report on a book one has not read.
- d) Falsification of attendance records of a laboratory or other class meeting.
- e) Supplying information to another student knowing that such information will be used in a dishonest way.
- f) Submission of work (papers, journal abstracts, etc.) which has received credit in a previous course to satisfy the requirement(s) of a second course without the knowledge and permission of the instructor of the second course.
- g) The above list is not exhaustive. In the event there is a question as to whether alleged conduct falls within the scope of the Academic Honor Code, the vice president and dean of academic affairs' determination shall be final.

First-Year Program Philosophy and Goals 2007-08

A residentially-based, interdisciplinary first-year program is an ideal environment for beginning the four-year process of developing the complex intellectual and social skills that are at the heart of a liberal education and the habits of considered values and engaged citizenship that such an education should produce. The First-Year Program (FYP) and First-Year Seminar (FYS) are the core of our institutional commitment to improving your ability to engage in critical inquiry and research, to design and deliver written, spoken and/or visual texts that demonstrate rhetorical sensitivity, and to be sophisticated readers, listeners, and viewers of the texts of others. We believe that these same competencies can help develop your ability to communicate across differences (e.g., race, gender, sexual orientation, class, ethnicity, political views) as you find ways to live and learn together in the residence halls and as engaged and ethically reflective citizens both during and after your college years. These goals should be understood as the first step in our work with you over a four-year process of helping you to meet the University's Aims and Objectives.

We hope to help you see that writing, speaking, research, and interacting with others are rhetorical endeavors. Effective communicators are, by definition, rhetorically sensitive. Rhetorical sensitivity means understanding that all communication, whether formal or informal, involves having to make choices about your messages, whether written, spoken, or visual. To become an effective communicator, you need to recognize that the creation of a meaningful and powerful message involves both a creator and an audience, and that therefore the voice you adopt in your communication, and the audience you imagine yourself communicating to, matter a great deal in creating your message. The choices you make in writing and speaking are central in determining how people read and hear your voice. Becoming conscious and reflective about those choices, and their ethical dimensions, is a central goal of the FYP and FYS.

Working with you so that you become more rhetorically sensitive means that you should be increasingly able to assess the requirements of a particular task and make intentional decisions about which mode or modes of communication and inquiry would be most effective in addressing it. To do so, you must develop specific writing, speaking, research, and technological competencies. To accomplish these goals, the FYP and FYS will present you with assignments that ask you to engage in a process that involves **recognizing** the rhetorical situation, **planning** communication strategies to address the task at hand, **composing and presenting** the message, and then engaging in **critical assessment** of your own work and that of others. The results of that assessment process will allow you to rethink, restructure, and revise your work. We further recognize that this process is not linear and that the effective creation of texts requires that you move back and forth among these four elements of the message creation process. This is why we require that your writing and speaking assignments be "projects" that include preparatory exercises and multiple drafts or rehearsals, all of which ask you to continue to reflect critically on the choices you have made in constructing your message.

This process of increased rhetorical awareness and skill development is at the heart of the philosophical and pedagogical perspectives that inform the work of the FYP and FYS. Because this process both transcends and integrates a variety of specific skills, the program has a philosophical commitment to designing assignments that ask you to integrate various modes of communication in furtherance of the higher-level rhetorical goals in which they are situated.

To ensure that the program is meeting its stated goals, all FYP and FYS syllabi are read by other faculty in the program to determine if they include a variety of assignments that forward the writing, speaking, research, and literacy goals of the program. All FYP and FYS courses have to be approved by faculty in the program before they are offered.

